

PATENT  
JC20 Rec'd PCT/PTO 28 SEP 2005 00691031

## IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Shin-ichi AYABE et al.

Conf.

Application No. NEW NATIONAL PHASE

Group

Filed September 28, 2005

Examiner

POLYNUCLEOTIDE ENCODING 2-HYDORXYISOFLAVANONE DEHYDRATASE AND  
APPLICATION OF THE SAME**INFORMATION DISCLOSURE STATEMENT  
(SUBMISSION CONCURRENT WITH THE  
FILING OF A NEW PATENT APPLICATION)**Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

September 28, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, and in fulfillment of the duty of disclosure under 37 C.F.R. § 1.56, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION**

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

**II. COPIES**

- ☐ Copies of the U.S. patents or publications are not submitted since the USPTO has waived their submission for applications filed after June 30, 2003.
- ☐ Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☒ This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should have been forwarded from the International Search Authority pursuant to the trilateral agreement between the USPTO, EPO and JPO, or they are U.S. patents or U.S. published applications. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE  
(check at least one box)

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a. ☐ DOCUMENTS IN THE ENGLISH LANGUAGE

The attached non U.S. patents, non U.S. patent application publications, foreign publications, or other information in the English language do not require a statement of relevancy.

b. ☐ DOCUMENTS NOT IN THE ENGLISH LANGUAGE

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

c. ☒ FOREIGN SEARCH REPORT OR ACTION

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A) (3).

d. ☐ OTHER

The following additional information is provided for the Examiner's consideration.

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If The Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned.

Respectfully submitted,

YOUNG & THOMPSON

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Enclosures: ☒ Form PTO-1449(s)  
☐ Documents  
☒ Foreign Search Report  
☐ Other: \_\_\_\_\_

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**

(Use several sheets if necessary)

Attorney Docket No.:  
**8062-1031**Application No.:  
**10/551655**  
NEW NATIONAL PHASEApplicant:  
**Shin-ichi AYABE et al.**Filing Date:  
**September 28, 2005**

Group Art Unit:

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing date (if appropriate)

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	WO 00/46356	8/10/2000	WIPO				

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	AKASHI T. et al., New Scheme of the Biosynthesis of Formononetin Involving 2, 7, 4' - Trihydroxyisoflavanone but Not Daidzein as the Methyl Acceptor., Biosci. Biotechnol. Biochem. (2000), Vol. 64, No. 10, pages 2276 to 2279
	AKASHI, T. et al., Cloning and functional expression of a cytochrome P450 cDNA encoding 2-hydroxyisoflavanone synthase involved in biosynthesis of the isoflavonoid skeleton in licorice., Plant. Physiol., (1999.11), Vol. 121, No. 3, pages 821 to 828
	AKASHI, T. et al., cDNA cloning and biochemical characterization of S-adenosyl-L-methionine: 2,7,4'-trihydroxyisoflavanone 4'-O-methyl transferase, a critical enzyme of the legume isoflavonoid phytoalexin pathway., Plant. Cell Physiol., (2003.02), Vol.44, No. 2, pages 103 to 112
	HAMANATSUKA, T. et al., Purification of 2-hydroxyisoflavanone dehydratase from the cell cultures of PUERARIA LOBATA., Phytochemistry (1998), Vol. 49, No. 2, pages 497 to 505

EXAMINER:

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

\* English language abstract provided for the Examiner's convenience